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RAW SEQUENCE LISTING

DATE: 01/28/2002

PATENT APPLICATION: US/10/007,262

TIME: 11:37:02

Input Set : N:\Crf3\RULE60\10007262.raw
Output Set: N:\CRF3\01282002\J007262.raw

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1 <110> APPLICANT: Bistrup, Annette
            Rosen, Steven D.
   2
            Tangemann, Kirsten
    3
            Hemmerich, Stefan
    5 <120> TITLE OF INVENTION: GLYCOSYL SULFOTRANSFERASE-3
    6 <130> FILE REFERENCE: 6510-107CIP
    7 <140> CURRENT APPLICATION NUMBER: 10/007,262
    8 <141> CURRENT FILING DATE: 2001-11-08
    9 <150> PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 09/190,911
-> 10 <151> PRIOR FILING DATE: EARLIER FILING DATE: 1998-11-12
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   11 <160> NUMBER OF SEQ ID NOS: 8
   12 <170> SOFTWARE: FastSEQ for Windows Version 3.0
   14 <210> SEO ID NO: 1
   15 <211> LENGTH: 386
   16 <212> TYPE: PRT
   17 <213> ORGANISM: H. sapiens
   18 <400> SEQUENCE: 1
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   21
                                            25
   22
            Ser Leu Ser Met Lys Ala Gln Pro Glu Arg Met His Val Leu Val Leu
   23
                                        40
   24
            Ser Ser Trp Arg Ser Gly Ser Ser Phe Val Gly Gln Leu Phe Gly Gln
   25
                                    55
   26
   27
            His Pro Asp Val Phe Tyr Leu Met Glu Pro Ala Trp His Val Trp Met
                                70
                                                    75
   28
            Thr Phe Lys Gln Ser Thr Ala Trp Met Leu His Met Ala Val Arg Asp
   29
                                                90
   30
            Leu Ile Arg Ala Val Phe Leu Cys Asp Met Ser Val Phe Asp Ala Tyr
   31
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   32
            Met Glu Pro Gly Pro Arg Arg Gln Ser Ser Leu Phe Gln Trp Glu Asn
   33
                                        120
   34
   35
            Ser Arg Ala Leu Cys Ser Ala Pro Ala Cys Asp Ile Ile Pro Gln Asp
                                    135
   36
            Glu Ile Ile Pro Arg Ala His Cys Arg Leu Leu Cys Ser Gln Gln Pro
   37
                                150
                                                    155
            Phe Glu Val Val Glu Lys Ala Cys Arg Ser Tyr Ser His Val Val Leu
   39
   40
                            165
                                                170
            Lys Glu Val Arg Phe Phe Asn Leu Gln Ser Leu Tyr Pro Leu Lys
   41
   42
                                            185
            Asp Pro Ser Leu Asn Leu His Ile Val His Leu Val Arg Asp Pro Arg
   43
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RAW SEQUENCE LISTING DATE: 01/28/2002 PATENT APPLICATION: US/10/007,262 TIME: 11:37:02

Input Set : N:\Crf3\RULE60\10007262.raw
Output Set: N:\CRF3\01282002\J007262.raw

45 46		Ala	Val 210	Phe	Arg	Ser	Arg	Glu 215	Arg	Thr	Lys	Gly	Asp 220	Leu	Met	Ile	Asp	
47		Ser		Ile	Val	Met	Glv		His	Glu	Gln	Lys	Leu	Lys	Lys	Glu	Asp	
48		225	5				230					235		-	_		240	
49			Pro	Tyr	Tyr	Val	Met	Gln	Val	Ile	Cys	Gln	Ser	Gln	Leu	Glu	Ile	
50				-	•	245					250					255		
51		Tyr	Lys	Thr	Ile	Gln	Ser	Leu	Pro	Lys	Ala	Leu	Gln	Glu	Arg	Tyr	Leu	
52		_	Ī		260					265					270			
53		Leu	Val	Arg	Tyr	Glu	Asp	Leu	Ala	Arg	Ala	Pro	Val	Ala	Gln	Thr	Ser	
54				275					280					285				
55		Arg	Met	Tyr	Glu	Phe	Val	Gly	Leu	Glu	Phe	Leu	Pro	His	Leu	Gln	Thr	
56			290					295					300					
57		Trp	Val	His	Asn	Ile	Thr	Arg	Gly	Lys	Gly		Gly	Asp	His	Ala		
58		305					310					315					320	
59		His	Thr	Asn	Ala	Arg	Asp	Ala	Leu	Asn		Ser	Gln	Ala	Trp		\mathtt{Trp}	
60						325					330				_	335	_	
61		Ser	Leu	Pro	Tyr	Glu	Lys	Val	Ser.		Leu	Gln	Lys	Ala		Gly	Asp	
62					340					345			_		350		·~ 3	
63		Ala	Met		Leu	Leu	Gly	Tyr	Arg	His	Val	Arg	Ser		GIn	Glu	GIn	
64				355		_	_	_	360	_	-m1	_	m1.	365	D	a 1		
65		Arg		Leu	Leu	Leu	Asp		Leu	Ser	Thr	Trp		vaı	Pro	GIU	GIII	
66			370					375					380					
67			His															
68	.010.	385	TD 1		2													
	<210>																	
	<211>				2													
	<212><213>				Cai	nian	e											
	<400>				. <i>5</i> a	PT¢II.	3											
75	\400 /	aaci	tega	ממר ו	cagg	atαc	at d	caqt.	ctaac	a aa	aaaa	tact	tcc	tcat	tta .	cttci	tcccag	. 60
76		CCC	acct	caa (acaa.	tete	aa a	accc	ct.t.aa	a ort.	ctca	gcag	tat	taaa	act :	qtta	ctttca	120
77		cago	atta	ata (ggag	caaa	ta c	tttc	tcaa	a cc	catc	ttac	aaq	tct	tcc .	actt	cagcac	180
7.8		aato	acta	cta	ccta	aaaa	aa t	gaag	ctcci	t qc	tgtt [.]	tctg	gtt	taca	aga	tggc	catctt	240
79		aact	tcta	ttc ·	ttcc	acat	qt a	cage	cacaa	a ca	tcag	ctcc	ctg	tcta	tga .	aggc	acagcc	300
80		cgae	acac	atg (cacq	tgct	gg t	tctg	tctt	c ct	ggcg	ctct	ggc	tctt	ctt	ttgt	ggggca	360
81		gcti	tttt	ggg (cage	accc	aga	tgtt	ttcta	a cc	tgat	ggag	ccc	gcct	ggc -	acgt	gtggat	420
82		gaco	cttc	aag	caga	gcac	cg c	ctgg	atgct	t gc	acat	ggct	gtg	eggg	atc	tgata	acgggc	480
83	-	cgt	cttc	ttg ·	tgcg	acat	ga g	cgtc	tttga	a tg	ccta	catg	gaa	cctg	gtc	cccg	gagaca	540
84		gtc	cage	ctc ·	tttc	agtg	gg a	gaac	agcc	g gg	ccct	gtgt	tct	gcac	ctg	cctg	tgacat	600
85		cate	ccca	caa	gatg	aaat	ca t	cccc	cggg	c to	actg	cagg	ctc	ctgt	gca	gtca	acagcc	660
86		ctti	tgag	gtg	gtgg	agaa	gg c	ctgc	cgct	c ct	acag	ccac	gtg	gtgc	tca	agga	ggtgcg	720
87		ctt	cttc	aac	ctgc	agtc	cc t	ctac	ccgc	t gc	tgaa	agac	CCC	tccc	tca	acct	gcatat	780
88		cgt	gcac	ctg	gtcc	ggga	CC C	ccgg	gccg	t gt	tccg	ttcc	cga	gaac	gca	caaa	gggaga	840
89		tct	catg	att (gaca	gtcg	ca t	tgtg	atgg	g gc	agca	tgag	cag	aaac	tca	agaa	ggagga	900
90		ccaa	accc	tac	tatg	tgat	gc a	ggtc	atct	g cc	aaag	ccag	ctg	gaga	tct	acaa	gaccat	960
91		cca	gtcc	ttg	ccca	aggc	cc t	gcag	gaac	g ct	acct	gctt	gtg	cgct	atg	agga	cctggc	1020
92		tcga	agcc	cct	gtgg	ccca	ga ç	ttcc	cgaa [.]	t gt	atga	attc	gtg	ggat	cgg	aatt	cttgcc	1080
93		cca	tctt	cag	acct	gggt	gc a	caac	atca	c cc	gagg	caag	ggc	atgg	gtg	acca	cgcttt	1140
94		cca	caca	aat	gcca	ggga	tg c	cctt	aatg	t ct	ccca	ggct	tgg	cgct	ggt	CTTT	gcccta	1200

RAW SEQUENCE LISTING DATE: 01/28/2002 PATENT APPLICATION: US/10/007,262 TIME: 11:37:02

Input Set : N:\Crf3\RULE60\10007262.raw
Output Set: N:\CRF3\01282002\J007262.raw

	95		tgaaaaggtt tetegaette agaaageetg tggegatgee atgaatttge tgggetaeeg	1260
	96		ccacgtcaga totgaacaag aacagagaaa cotgttgotg gatottotgt ctacotggac	1320
	97		tgtccctgag caaatccact aagagggttg agaaggcttt gctgccacct ggtgtcagcc	1380
	98		tcagtcactt tctctgaatg cttctgagcc ttgcctacat ctctgagcct taactacatg	1440
	99		totgtgggta toacactgag tgtgagttgt gtocacacgt gotcaagcag aaggactttt	1500
	100		gtgtccatgc ttgtgtctag aaaacagact ggggaacctt atgtgagcag cacatcccac	1560
	101		cagtgaaaca gggtattgct cttcttcttt tcttgatctt cctgtctggg cagacttcag	1620
	102		agactttgtg gcctggaggc ctattaagca cgacacagta tcagtggaat tgatccataa	1680
	103		acctccctgt ccacatcttg cccaatgggg aatggatctt tcaccaaaga gctcaccagc	1740
	104		attttccaca qagatqcaaa ttctgagccc ttggagttcc cagtggattc aaggaaggaa	1800
	105		gtgggaacaa ggttggatgc ctacttatga gcttgaccat cacagctatc ggtaatcaga	1860
	106		aatatgaaac aaaatctctg cacaaaagag caagctctta agttcacagg gtgcctgggc	1920
	107		tgcatttgaa tatcacttcc cctctgcatt ttcccatcac atagaagact ttgacctgtg	1980
	108		aaqctqccat ctqttaatac taaaattccc aaataagaaa aaaaaaaaaa	2032
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			TYPE: DNA	
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			OTHER INFORMATION: primer	
			FEATURE:	
			NAME/KEY: misc_feature	
			LOCATION: (1)(29)	
			OTHER INFORMATION: n = inosine	
			SEQUENCE: 3	
w>			twytwyctnt wygarccnct ntggcayst	29
		<210>	SEQ ID NO: 4	
			LENGTH: 29	
			TYPE: DNA	
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			FEATURE:	
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			FEATURE:	
			NAME/KEY: misc_feature	
			LOCATION: (1)(29)	
			OTHER INFORMATION: n = inosine	,
			SEQUENCE: 4	
W>	134		ctnaanctns tncwrctnst nmgnraycc	29
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	137	<211>	LENGTH: 29	
	138	<212>	TYPE: DNA	
			ORGANISM: Artificial Sequence	
	140	<220>	FEATURE:	
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			NAME/KEY: misc_feature	
			LOCATION: (1)(29)	
			OTHER INFORMATION: n = inosine	
			SEQUENCE: 5	
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RAW SEQUENCE LISTING

DATE: 01/28/2002

PATENT APPLICATION: US/10/007,262

TIME: 11:37:02

Input Set : N:\Crf3\RULE60\10007262.raw
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	149	<210>	SEQ ID NO: 6	
	150	<211>	LENGTH: 26	
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	152	<213>	ORGANISM: Artificial Sequence	
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	154	<223>	OTHER INFORMATION: primer	
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	156	<221>	NAME/KEY: misc_feature	
			LOCATION: (1)(26)	
	158	<223>	OTHER INFORMATION: n = inosine	
			SEQUENCE: 6	2.0
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			SEQ ID NO: 7	
			LENGTH: 37	
	164	<212>	TYPE: DNA	
	165	<213>	ORGANISM: H. sapiens	
			SEQUENCE: 7	27
	167		aaactcaaga aggaggacca accctactat gtgatgc	37
	169	<210>	SEQ ID NO: 8	
	170	<211>	LENGTH: 47	
	171	<212>	TYPE: DNA	
			ORGANISM: H. sapiens	
	173	<400>	SEQUENCE: 8	47
	174		ataaagcttg tggatttgtt cagggacatt ccaggtagac agaagat	47

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/007,262

DATE: 01/28/2002

TIME: 11:37:03

Input Set : N:\Crf3\RULE60\10007262.raw Output Set: N:\CRF3\01282002\J007262.raw

L:10 M:256 W: Invalid Numeric Header Field, Wrong Prior FILING DATE:YYYY-MM-DD

L:121 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 L:134 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 L:147 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 L:160 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6